

Two New Mites (Acarina: Laelapinae) from Oriental Insectivores (Mammalia: Insectivora)

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ABSTRACT: The two species described are closely allied parasites of shrews (*Anourosorex squamipes* and *Soriculus fumidus*) from Taiwan, and of a mole (*Urotrichus talpoides*) from Japan (Honshu, Shikoku, and Kyushu). The similarity of these two species indicates a common geographic origin of the hosts, and suggests that there are probably allied species of these mites on the Chinese mainland. These two species of *Haemolaelaps* appear most closely related to the *ulysses* group, three species from Australian marsupials.

A DISTINCTIVE MESOSTIGMATIC MITE is a characteristic parasite of shrews of Taiwan, and another closely related species parasitizes shrew-moles of Japan. These two species, which are described below, seem to be rather close to the *ulysses* group recently described and defined by Domrow (1964), but they differ in some features. Both have the following characters which, collectively, separate these mites from other species of *Haemolaelaps*, including those of the *ulysses* group:

Small, delicate laelapine mites, with legs rather short and body subovoid. Epigynial plate slightly expanded posteriorly, bearing only the anteriormost pair of setae. Anal plate broader than epigynial plate, at least as broad as long and concave anteriorly. Gnathosoma and chela typical for laelapine mites; pilus dentilis broadened, and as long as fixed digit. Palpal trochanteral seta not inflated. Dorsal plate covering most of dorsal body surface; with 35 or more pairs of minute setae. Setae on coxae II and III not expanded and hyaline. Femora and trochanters without apically notched setae.

Haemolaelaps soricinus, n. sp.

DORSUM (Fig. 1 *A*): Dorsal plate ovoid (wider posteriorly), with 35 pairs of minute setae, only the caudalmost being distinctly longer than the others. Shoulders reduced. With several small pores as illustrated. Soft parts with about 10 pairs of setae.

VENTER (Fig. 1 *E*): Sternal plate (Fig. 1 *B*) with the anteriormost pair of setae distinctly in front of the anterior margin; anterior margin rounded and convex. Sternal setae rather short and delicate, not extending beyond base of posteriorly adjacent setae. Epigynial plate expanded posteriorly to about the distance between coxae IV. Anal plate (Fig. 1 *D*) wider than epigynial plate, wider than long, and anterior margin concave and rounded; anus, anal and adanal setae on caudal half of anal plate. Coxae and legs rather stout; setae not heavy. Coxae without spurs; coxa II without anterior marginal spur. Peritremal plate not with a detached sclerite extended around coxa IV.

GNATHOSOMA (Fig. 1 *C*): Deutosternum with six or seven rows of teeth of one or two teeth each. Chela (Fig. 1 *F*) with a circlet of five or six hyaline hairs subtending the movable digit; a single curved hair at the base of the fixed digit. Fixed digit with a broad curved pilus dentilis. Tectum apparently bilobed, with a longitudinal groove or grooves.

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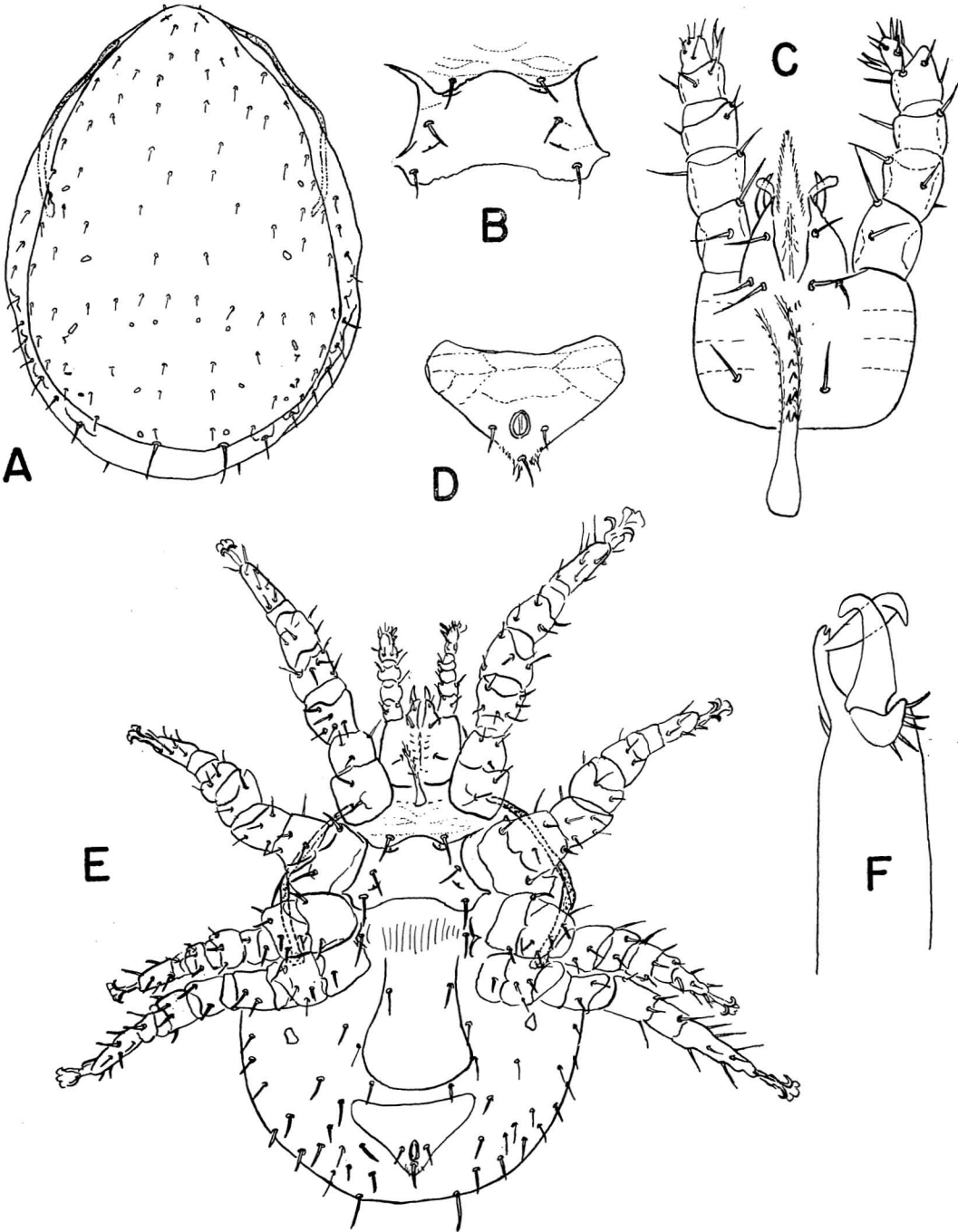


FIG. 1. *Haemolaelaps soricinus*. A, Dorsum; B, sternal plate; C, gnathosoma; D, anal plate; E, venter; F, chela.

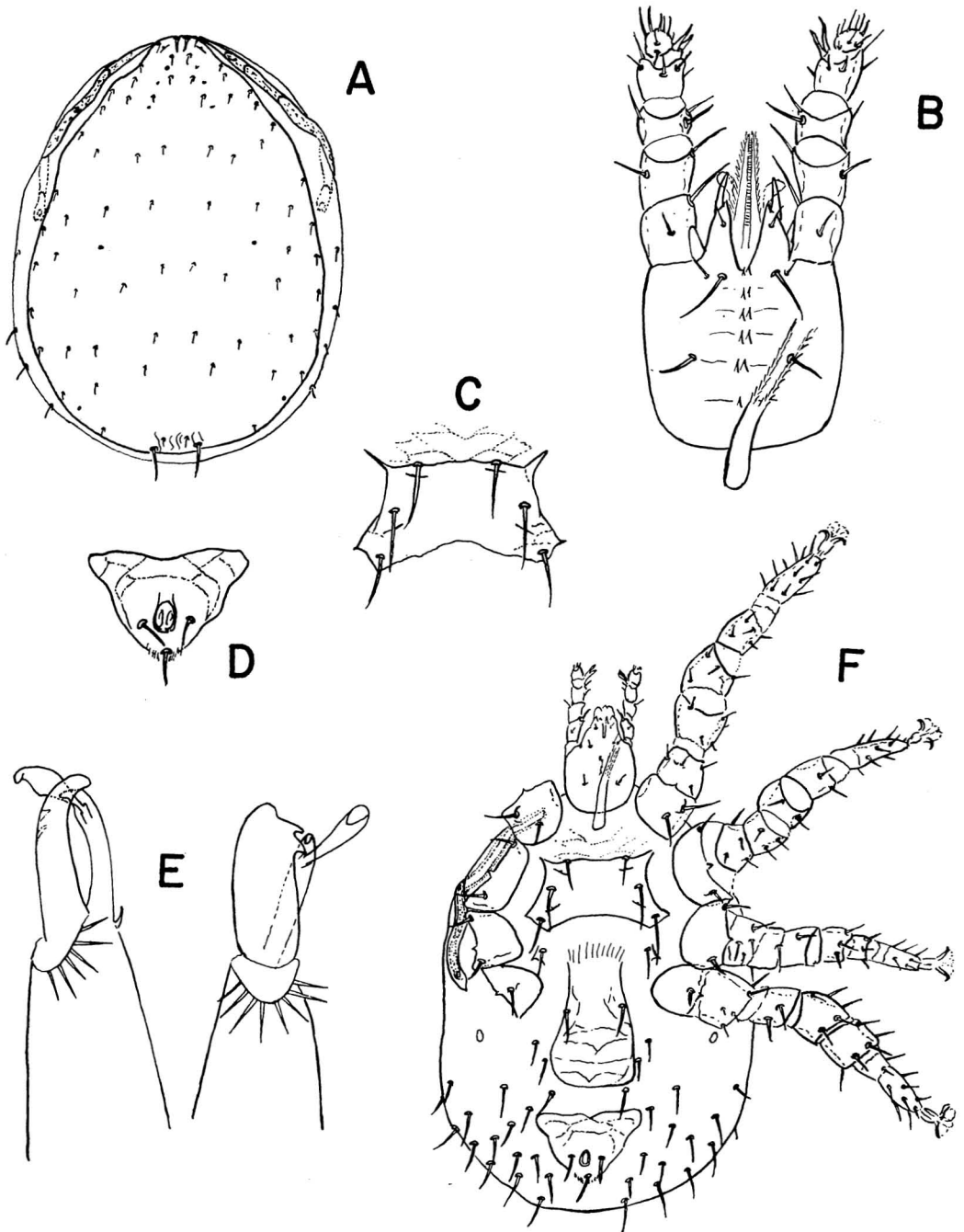


FIG. 2. *Haemolaelaps bimizu*. A, Dorsum; B, gnathosoma; C, sternal plate; D, anal plate; E, chela; F, venter.

TYPE: Holotype female ex *Anourosorex squamipes*, 10 miles east of Wu-She (6,400 ft elevation), Nan-T'ou Prefecture, Taiwan, 19 October 1963. Paratype females: one with same data as type; one from type host and type locality, 25 July 1963; one from type host, Ali Shan, Chia I Prefecture, 19 February 1965; three females ex *Soriculus fumidus*, Ali Shan, Chia I Prefecture, 19 February 1965. All collected by the author. Holotype deposited in the U. S. National Museum. Paratypes deposited in the Bernice P. Bishop Museum, the Queensland Institute for Medical Research, and the Rocky Mountain Laboratory.

Haemolaelaps himizu, n. sp.

DORSUM (Fig. 2 A): Dorsal plate ovoid (wider posteriorly), with 41 pairs of minute setae (caudalmost dorsal setae are somewhat longer). Dorsal plate with several short grooves or fissures between caudalmost dorsal setae. Soft parts with 4 pairs of setae.

VENTER (Fig. 2 F): Sternal plate (Fig. 2 C) with anteriormost setae barely on plate; anterior margin slightly and irregularly convex. Sternal setae long, projecting beyond base of posteriorly adjacent setae. Epigynial plate expanded posteriorly almost to distance between coxae IV. Anal plate (Fig. 2 D) wider than epigynial plate, wider than long; and with anus, anal and adanal setae on caudal half of anal plate. Anal plate distinctly concave on anterior margin. Coxae and legs rather stout. Peritremal plate not with a detached sclerite extending around coxa IV.

GNATHOSOMA (Fig. 2 B): Deutosternum with six rows of teeth, each row of two (sometimes one) teeth. Chela (Fig. 2 E) with a circlet of six to eight hyaline hairs subtending the movable digit; a single hair at the base of the fixed digit. Tectum folded at anterior margin so that it is three-lobed (or apparently so).

TYPE: Holotype female ex *Urotrichus talpoides* Temminck, from Ohara, Kyoto-Fu, Honshu, Japan; 6 March 1952. Paratypes, from type host: one female, Hanase, Kyoto-Fu, 10 June 1952; one female, Hanase, Kyoto-Fu, 1 August 1952. All collected by the author. Two additional females, not designated as paratypes, from "Camp Fuji" (lower slopes of Mt. Fuji). Holotype deposited in the U. S. National Museum. One paratype in Bernice P. Bishop Museum; one paratype in collection of the author. The two additional specimens are in the collection of the Department of Entomology, Walter Reed Army Medical Hospital.

The name *himizu* is the Japanese name for the host.

COMMENT: The occurrence of these two related parasites on Taiwan shrews and a Japanese shrew-mole suggests that additional allied species of *Haemolaelaps* may occur on the Chinese mainland on the complex of soricoid insectivores.

REFERENCE

- DOMROW, ROBERT. 1964. The *ulysses* species-group, genus *Haemolaelaps* (Acarina, Laelapidae). Proc. Linnean Soc. N.S.W. 89(1): 155-162.